## **ABSTRACT**

## NEUTRAL DENSITY DICHROIC OPTICAL FILTER

An optical thin film stack provides reflection of essentially all light except for a selected amount of transmission over a selected wavelength range. Reflecting, rather than absorbing, unwanted light avoids heating caused by light absorption and allows productive use of the non-transmitted light in some applications. In some embodiments, reflector designs are "stacked" on an optical substrate to provide serial optical reflectors. Stacking dichroic filters provides reduced sensitivity to cone angle and manufacturing advantages.